

THIS OPINION WAS NOT WRITTEN FOR PUBLICATION

The opinion in support of the decision being entered today (1) was not written for publication in a law journal and (2) is not binding precedent of the Board.

Paper No. 14

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte ROBERT D. ADAMS, JOHN CONNOR, DONALD A. EVANS
and LUIGI TERNULLO

Appeal No. 1997-0339
Application 08/330,768

ON BRIEF

Before KRASS, BARRETT and LALL, Administrative Patent Judges.
LALL, Administrative Patent Judge.

DECISION ON APPEAL

This is an appeal from the final rejection of claims 1 to 16, all the pending claims.

The disclosed invention relates to an apparatus and a method for selecting from a data path a test signal from among a true data signal and a complement data signal. The

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invention captures the test signal for testing and provides for testing both a true and complement data signal, rather than just one of them as in the prior art, since either one or both may be corrupted.

The invention is further illustrated below by claim 1.

1. A test circuit comprising:

means for selecting from a data path a test signal from amount a true data signal and a complement data signal; and

means for capturing said test signal for testing.

The references relied on by the Examiner are:

Rickard et al. (Rickard) 20, 1987	4,638,183	Jan.
Dervisoglu et al. (Dervisoglu) 26, 1991	5,068,881	Nov.

Claims 1 to 8 and 10 to 16 stand rejected under 35 U.S.C. § 103 over Rickard. Claim 9 stands rejected under 35 U.S.C. § 103 over Rickard and Dervisoglu.

Reference is made to Appellants' brief and the Examiner's answer and for their respective positions.

OPINION

We have considered the record before us and we will sustain the rejections of claims 1 to 16.

Appellants [brief, page 5] have elected to group claims

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2, 4 and 5 with claim 1, claims 7 to 9 with claim 6, and claims 11, 14 to 16 with claim 10. Claims 1, 3, 6, 10, 12 and 13 are argued separately.

We note that all the claims are rejected under 35 U.S.C. § 103. In rejecting claims under 35 U.S.C. § 103, it is incumbent upon the Examiner to establish a factual basis to support the legal conclusion of obviousness. See In re Fine, 837 F.2d 1071, 1073, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). In so doing, the Examiner is expected to make the factual determinations set forth in Graham v. John Deere Co., 383 U.S. 1, 17, 148 USPQ 459, 467 (CCPA 1966), and to provide a reason why one having ordinary skill in the pertinent art would have been Ledbetter to modify the prior art or to combine prior art references to arrive at the claimed invention. Such reason must stem from some teaching, suggestion or implication in the prior art as a whole or knowledge generally available to one having ordinary skill in the art. Uniroyal, Inc. v. Rudkin-Wiley Corp., 837 F.2d 1044, 1051, 5 USPQ2d 1434, 1438 (Fed. Cir.), cert. denied, 488 U.S. 825 (1988); Ashland Oil, Inc. v. Delta Resins

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& Refractories, Inc., 776 F.2d 281, 293, 227 USPQ 657, 664 (Fed. Cir. 1985), cert. denied, 475 U.S. 1017 (1986); ACS Hosp. System., Inc. v. Montefiore Hosp., 732 F.2d 1572, 1577, 221 USPQ 929, 933 (Fed. Cir. 1984). These showings by the examiner are an essential part of complying with the burden of presenting a prima facie case of

obviousness. Note In re Oetiker, 977 F.2d 1443, 1445, 24 USPQ2d 1443, 1444 (Fed. Cir. 1992).

We first take the independent claim 1. We have evaluated the positions of Appellants [brief, pages 7 to 10] and Examiner [answer, pages 3 and 6 to 8]. We find that, contrary to Appellants' argument, claim 1 does not exclude by explicit language a locally generated complement data signal. Thus, in fig.2 of Rickard, 30 is a true data signal and the output of inverter 34 is a complement data signal, element 32 is the claimed selecting means and 35 the capturing means. Therefore, we sustain the obviousness rejection of claim 1 and its grouped claims 2, 4 and 5 over Rickard.

With respect to claim 3, Appellants again argue [brief, page 10] that Rickard locally generates an inverse of a data

signal and a separate complement signal line is unnecessary. We are again not convinced that the claim language excludes by recitation a locally generated complement signal. Therefore, we sustain the obviousness rejection of claim 3 over Rickard.

With respect to the independent claim 6, we encounter the same problem with the interpretation of the claim. In fig. 2 of

Rickard, line 30 carries a true data, a line carrying the output of inverter 34 carries a complement. Together, they comprise a data path. Then, latch 35 is for capturing a test signal and a multiplexer 35 is coupled first to the data lines, and coupled second to the latch. A test signal is selected in response to the select signal 33. Therefore, we sustain the obviousness rejection of claim 6 and its grouped claims 7 to 9 over Rickard.

Regarding the independent claim 10, fig. 1 or 2 of Rickard shows the step of providing of a true data signal and a complement signal (at 16 and 18, and at 30 and output of 34 respectively) and the step of selecting at 20 and 24 in fig.1

or at 32 and 33 in fig. 2. Therefore, we sustain the Examiner's obviousness rejection of claim 10 and grouped claims 11 and 14 to 16 over Rickard.

With respect to claim 12, which has been argued separately, the step of "providing" said data signals and a select signal to a multiplexer can be seen from fig. 1 of Rickard. Keeping in mind that claim 12, like claim 10 does not exclude the locally generated complement signal, fig. 1 clearly shows a data signal 16 and its complement 18 are being provided to multiplexer 20 and a select signal 24 is also being provide to said multiplexer.

Therefore, we sustain the obviousness rejection of claim 12 over Rickard.

Regarding claim 13, another separately argued claim, Appellants' thrust of the argument is the same as before, i.e., Rickard [brief, page 13] only teaches selecting from among a data signal and its locally generated inverse. As before, we find that claim does not exclude by explicit recitation the locally generated inverse signal as being the claimed complement data signal. Therefore, we sustain the

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obviousness rejection of claim 13 over Rickard.

In summary, we have not sustained the rejection of claims 1 to 9. However, we have sustained the obviousness rejections of claims 10 to 16.

DECISION

The decision of the Examiner rejecting claims 1 to 16 under 35 U.S.C. § 103 is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED

ERROL A. KRASS

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	Administrative Patent Judge)	
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	LEE E. BARRETT)	BOARD OF
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	PARSHOTAM S. LALL)	
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